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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,323	08/02/2001	Jay Darrell Gillespie	34423/237429	5051

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EXAMINER

STEELE, JENNIFER A

ART UNIT

PAPER NUMBER

1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/921,323	GILLESPIE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jennifer Steele	1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10,29 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/7/2006 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claim 1-10, 29 and 30 rejected under 35 U.S.C. 103(a) as being obvious over Hills (US 5162074) in view of Geus et al. (US 5,814,349) and in further view of Mleziva (US 6,410,138) and Handbook of Fiber Chemistry, 3<sup>rd</sup> edition. Hills teaches an apparatus for making multi-component yarns and bicomponent fibers. Hills teaches distributing each separate component to an array of inlet holes for multiple spinneret orifices (claim 1). Hills teaches a spin pack assembly where the assembly includes plates, sandwiched together from top to bottom in the following sequence; a top plate a screen support plate a metering plate an etched distributor plat and a spinneret plate. (col 8, lines 60-68; col. 9 lines 1-5). Hills teaches a spinneret orifice array with varying densities of 4000 in 24 inches (col. 11, lines 15-22), 1768 orifices in a 3.5 inch x 21 inch plate which is equivalent to 6298 orifices/ sq. meter (col. 20, lines 7-25). Hills teaches a distribution plate with distribution flow passages formed by etching (col. 12, lines 27-30). Hills teaches quench air that contacts the filaments by flowing transversely across fibers (col. 23, lines 28-50).

Hills differs from the current application and does not teach an attenuator and Hills does not teach depositing the fibers on a continuous air-permeable web and applying suction beneath the air permeable belt to draw air through the belt. Hills does not teach bonding the filaments. Hills teaches polypropylene as a sheath and core and teaches melt flow index differentials of 8 and melt temperature differentials of 3 °C (Table I) but does not teach utilizing a reclaim polypropylene as one polymer components.

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Geus teaches an apparatus for the continuous production of a spun bond web. Geus teaches stretching the filament and depositing the filaments on a perforated sieve belt, also referred to an air-permeable belt, (col. 3, lines 35-42) with a suction blower below the belt that is independently controlled (col 2, lines 55-58).

Mleziva teaches spunbond multicomponent filaments and webs made from filaments wherein bicomponent filaments contains reclaim polymer. Mleziva teaches fine fiber filaments of less than 2 denier (col. 2, ln 20-25). Mleziva teaches a spunbond process of a first component and a second component where in the first component of polypropylene and the second polymer comprises reclaimed polymers including polypropylene (claims 4, 8 and 14).

Handbook of Fiber Chemistry, 3<sup>rd</sup> edition, Taylor and Francis, copyright 2006, chapter 3.6 and 3.7 details the melt spinning process for polypropylene fibers and the how it changes the polypropylene fiber properties.

It would have been obvious to one of ordinary skill in the art to add the attenuation process and air permeable belt process of Geus to the process of Hills motivated to improve the productivity of the spun bond manufacturing process. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use reclaim polypropylene motivated to use polymer scrap and waste as described by Mleziva. It would further of been obvious to one of ordinary skill in the art to use reclaim polypropylene and virgin polypropylene motivated by the understanding of how the melt spun process changes the polypropylene properties and can be reclaimed in the bicomponent fiber spunbond process described by Hills.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claim 1-10, 29 and 30 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-2, 4-6, 8, 10-13 and 15 of Taylor U.S. Patent No. 6,737,009 in view of Mleziva (US 6,410,138). Although the conflicting claims are not identical, they are not patentably distinct from each other because both current application and the patent claim a process for producing a bicomponent sheath and core fiber where in the sheath and the core are polypropylene. While Taylor, (US 6,737,009) does not teach reclaimed polypropylene, Mleziva teaches using reclaimed polymer, including polypropylene, and therefore it would be been obvious to one of ordinary skill in the art to use reclaimed polypropylene in the invention of Taylor.

### ***Response to Arguments***

2. Applicant's arguments with respect to claim 1-10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Steele whose telephone number is (571) 272-7115. The examiner can normally be reached on Office Hours Mon-Fri 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ELIZABETH M. COLE  
PRIMARY EXAMINER

2/26/2007.